

Good morning!

1. "Here"

2. Notes and practice finding area and perimeter

3. Picture due on Monday:)

**Friday the
13th**

**Friday
the 13th
2020**





**Area
and
Perimeter**

Perimeter

Distance AROUND the shape

"fence around the yard"

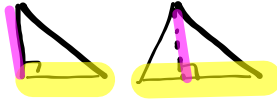
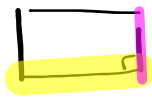
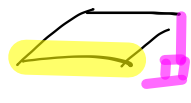
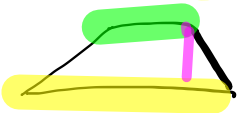


Area

Amount of space **INSIDE** the
boundary *"the yard itself"*



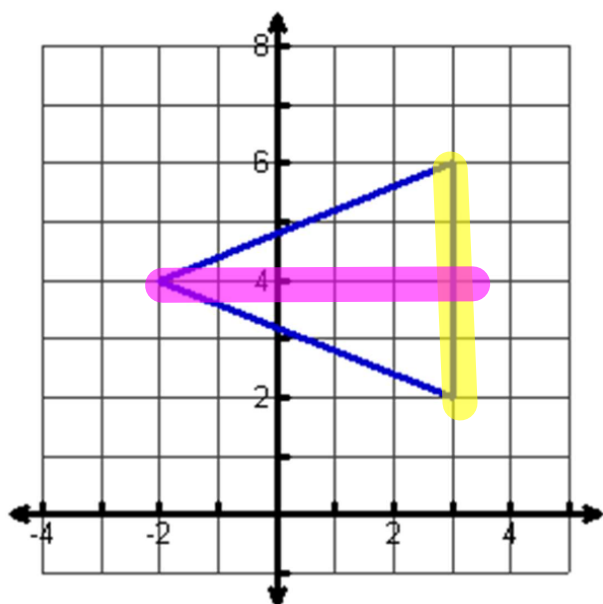
Area Formulas

- ▶ Triangle: $A = \frac{1}{2}bh$ 
 - ▶ Rectangle: $A = bh$ 
 - ▶ Parallelogram: $A = bh$ 
 - ▶ Trapezoid: $A = \frac{1}{2}(b_1 + b_2)h$ 
-

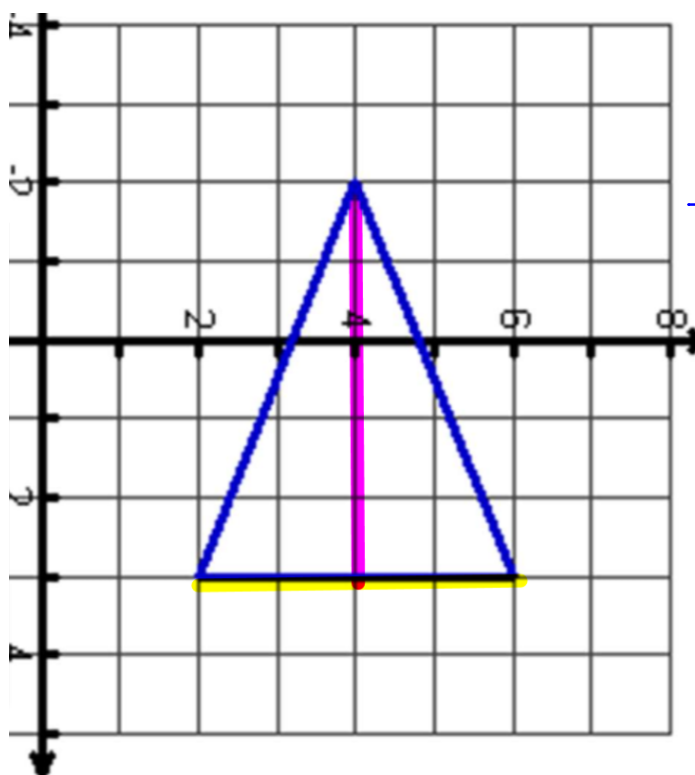
▶

Area & Perimeter on the Coordinate Plane

Find the area.

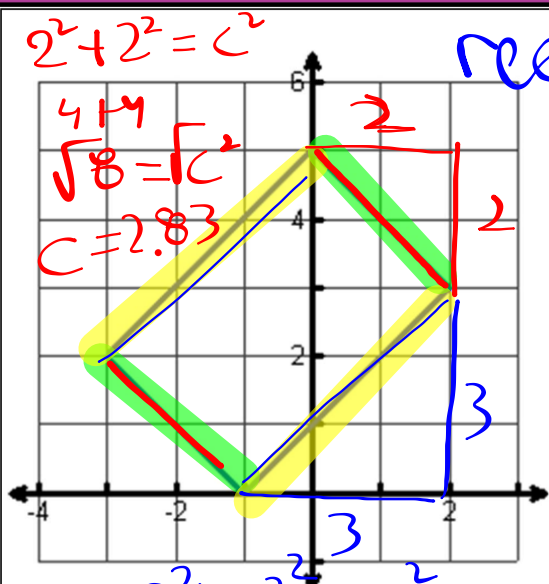


$$A = \frac{1}{2}(4)(5)$$
$$A = 10$$



$$\begin{aligned}A_{\Delta} &= \frac{1}{2}bh \\ &= \frac{1}{2}(4)(5) \\ &= 10\end{aligned}$$

Find the perimeter.



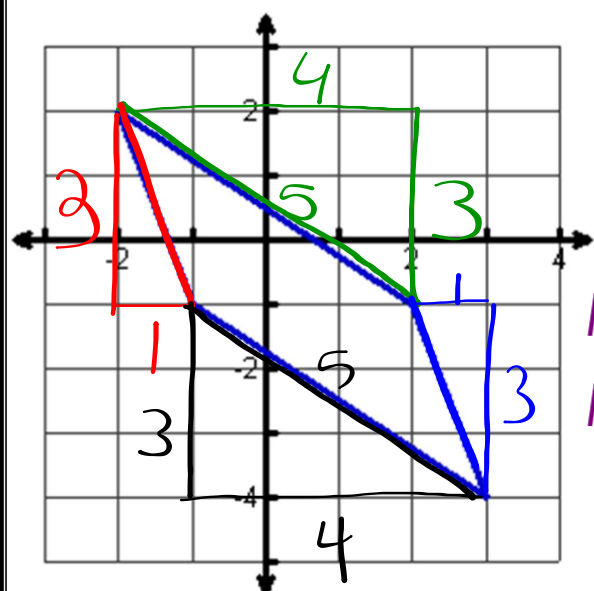
$2^2 + 2^2 = C^2$
 $4 + 4 = C^2$
 $\sqrt{8} = \sqrt{C^2}$
 $C = 2.83$

rectangle

$P = \sqrt{8} + \sqrt{8} + \sqrt{18} + \sqrt{18}$
 $P = 14.14$

$3^2 + 3^2 = C^2$
 $9 + 9 = \sqrt{18} = C$ 4.24

Find the perimeter.



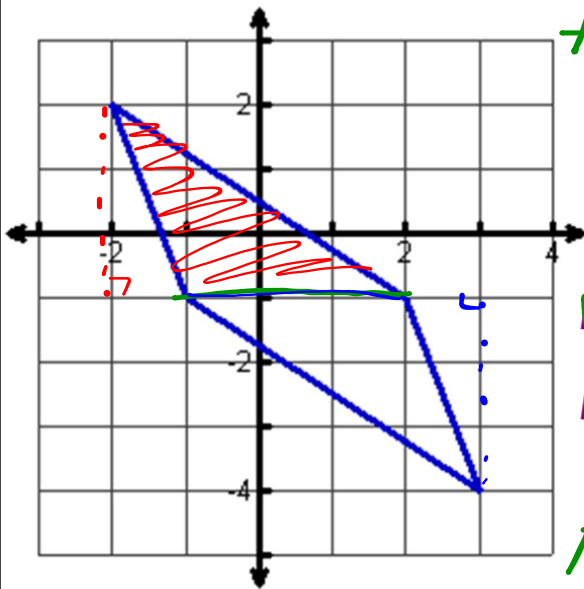
$$\sqrt{3^2 + 1^2}$$

$$\sqrt{4^2 + 3^2}$$

$$P = \sqrt{10} + \sqrt{10} + 5 + 5$$

$$P = 16.32$$

Find the perimeter.



$$A_{\square} = b \cdot h$$

$$A_{\Delta} = \frac{1}{2}bh$$

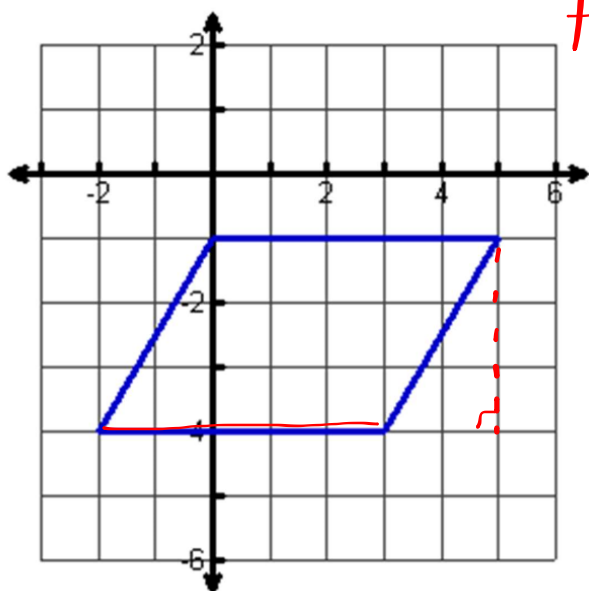
$$\frac{1}{2}(3)(3) = 4.5$$

$$A_{\Delta_2} = \frac{1}{2}(3)(3) = 4.5$$

~~$$P = \sqrt{10} + \sqrt{10} + 5 + 5$$~~
~~$$P = 16.32$$~~

$$A_{\square} = 9 \text{ sq. units}$$

Find the area.

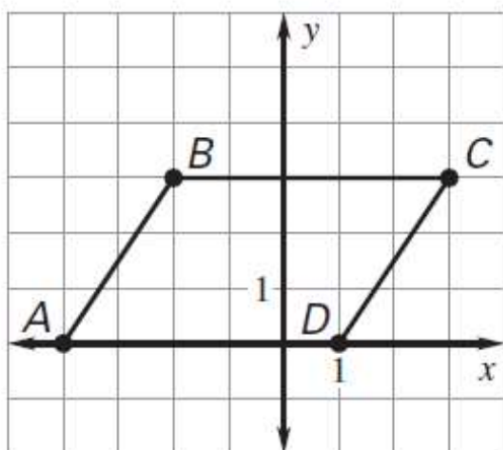


$$A_{\square} = b \cdot h \\ = (5)(3)$$

$$A = (5)(3)$$

$$A = 15$$

Find the area.



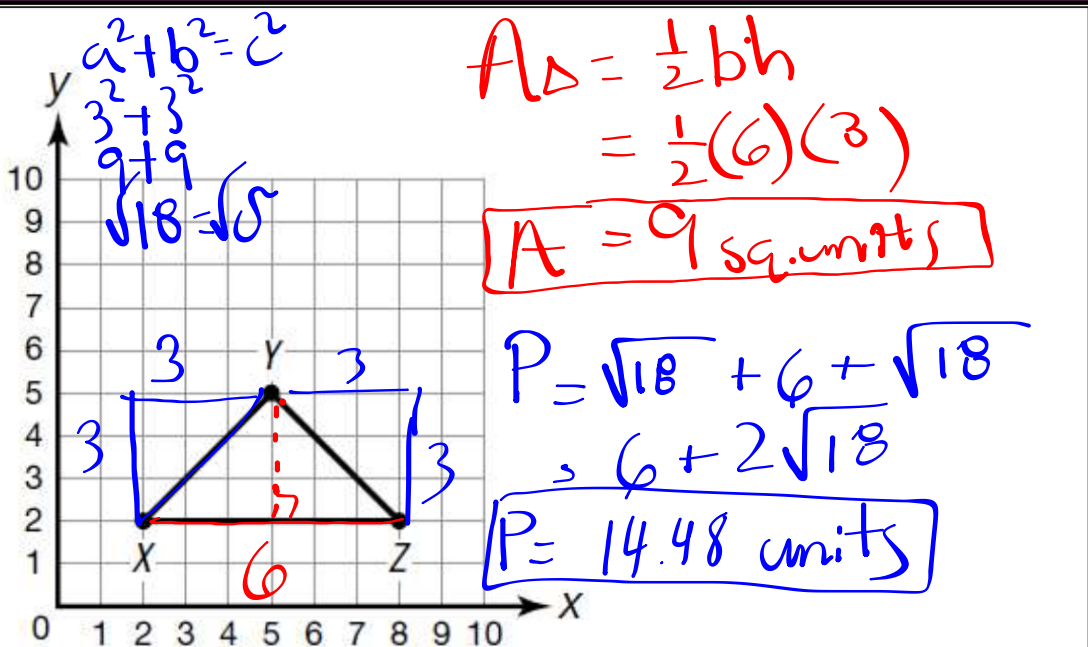
Find the area and perimeter.

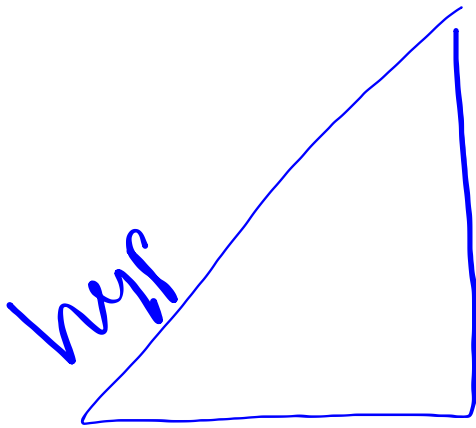
$4^2 + 4^2 = 32$
 $\sqrt{32} = 5.66$
 $M = \frac{4}{4} = 1$

Square
 $P = \sqrt{32} + \sqrt{32} + \sqrt{32} + \sqrt{32}$
 $= 4\sqrt{32}$
 $= 4(5.66)$
 $P = 22.64 \text{ units}$

$A_{\square} = b \cdot h$
 $= \sqrt{32} \cdot \sqrt{32}$
 $A = 32 \text{ sq. units}$

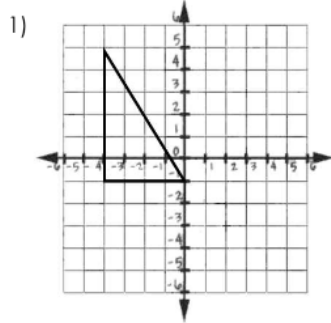
Find the area and perimeter.





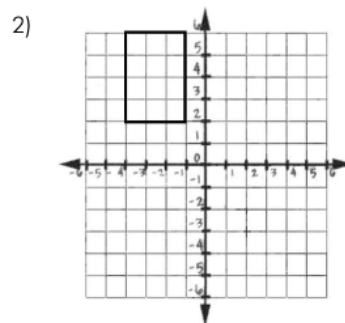
Area & Perimeter on the Coordinate Plane Practice Name: _____

Directions: Find the perimeter and area for each figure.



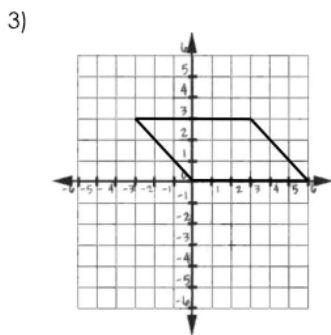
Perimeter: _____

Area: _____



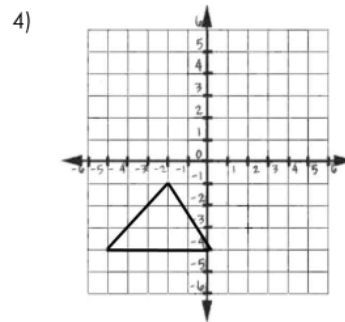
Perimeter: _____

Area: _____



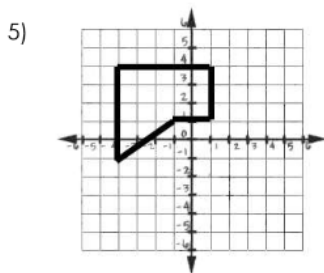
Perimeter: _____

Area: _____



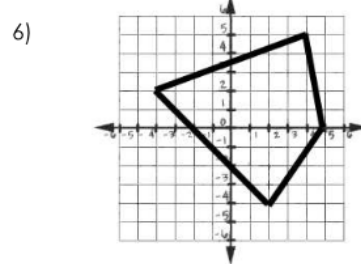
Perimeter: _____

Area: _____



Perimeter: _____

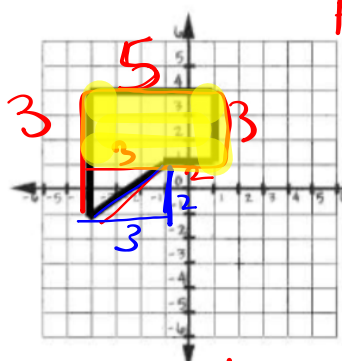
Area: _____



Perimeter: _____

Area: _____

5)



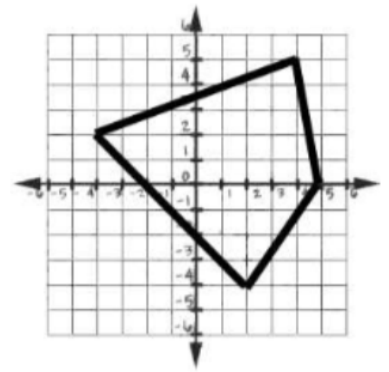
6)

$$P = 5 + 3 + 2 + 3.6HS$$

$$A_{\square} = 3(5) = 15$$

$$A_{\triangle} = \frac{1}{2}(3)(2) = 3$$

Perimeter: 18.61 units
 Area: 15 + 3 = 18 sq units



Perimeter: _____
 Area: _____

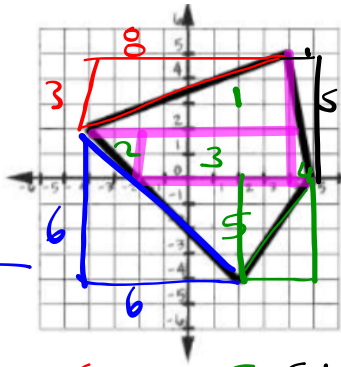
6)

$$\begin{aligned} &\sqrt{3^2+8^2} \\ &= \sqrt{73} \\ &= 8.5 \end{aligned}$$

$$\begin{aligned} &\sqrt{6^2+6^2} \\ &= \sqrt{72} \\ &= 8.5 \end{aligned}$$

Perimeter: $8.5 + 8.5 + 5 + 5.1 = 27.1 \text{ units}$

Area: 42.5 sq. units



$$A_1 = \frac{1}{2}(8)(3) = 12$$

$$A_2 = \frac{1}{2}(2)(2) = 2$$

$$A_3 = (6)(2) = 12$$

$$A_4 = \frac{1}{2}(1)(5) = 2.5$$

$$A_5 = \frac{1}{2}(7)(4) = 14$$

42.5

$$\begin{aligned} &\sqrt{8^2+1^2} \\ &= \sqrt{65} \\ &= 8.1 \end{aligned}$$

Distance, Pythagorean, and Perimeter

Name: _____

Directions: Find the distance between the following set of coordinates.

1. $(7, 3), (-1, -4)$

2. $(3, -5), (-3, 0)$

3. $(6, -7), (3, -5)$

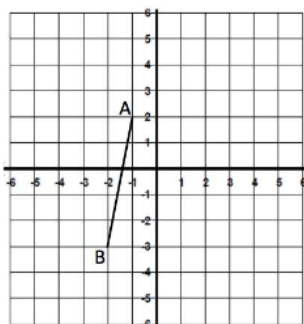
4. $(5, 1), (5, -6)$

5. $(1, 4), (2, 5)$

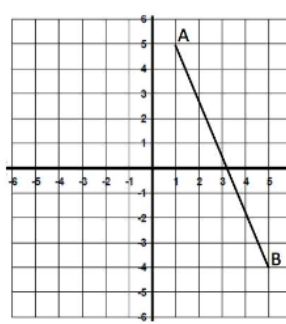
6. $(-2, 1), (1, 8)$

Directions: Find the distance of the segment on each graph by using the Pythagorean Theorem.

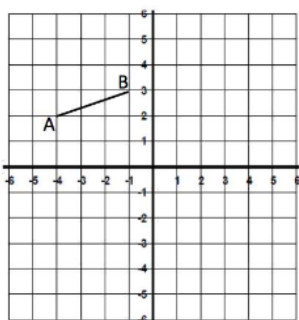
7.



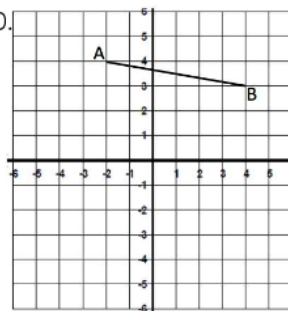
8.



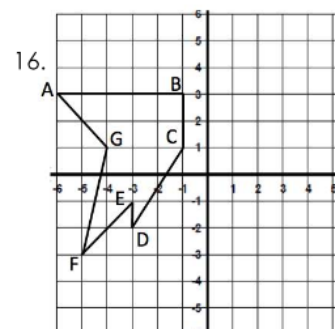
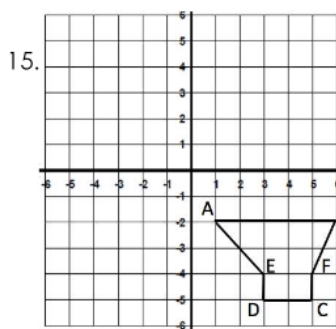
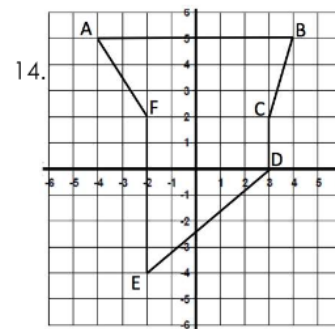
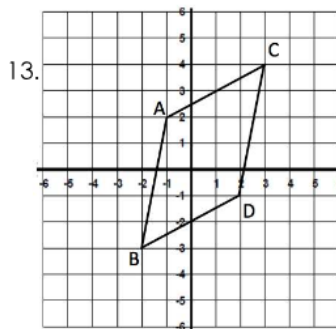
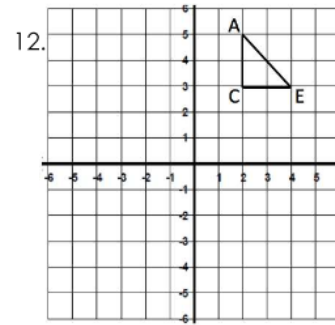
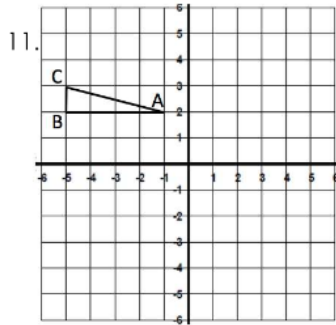
9.

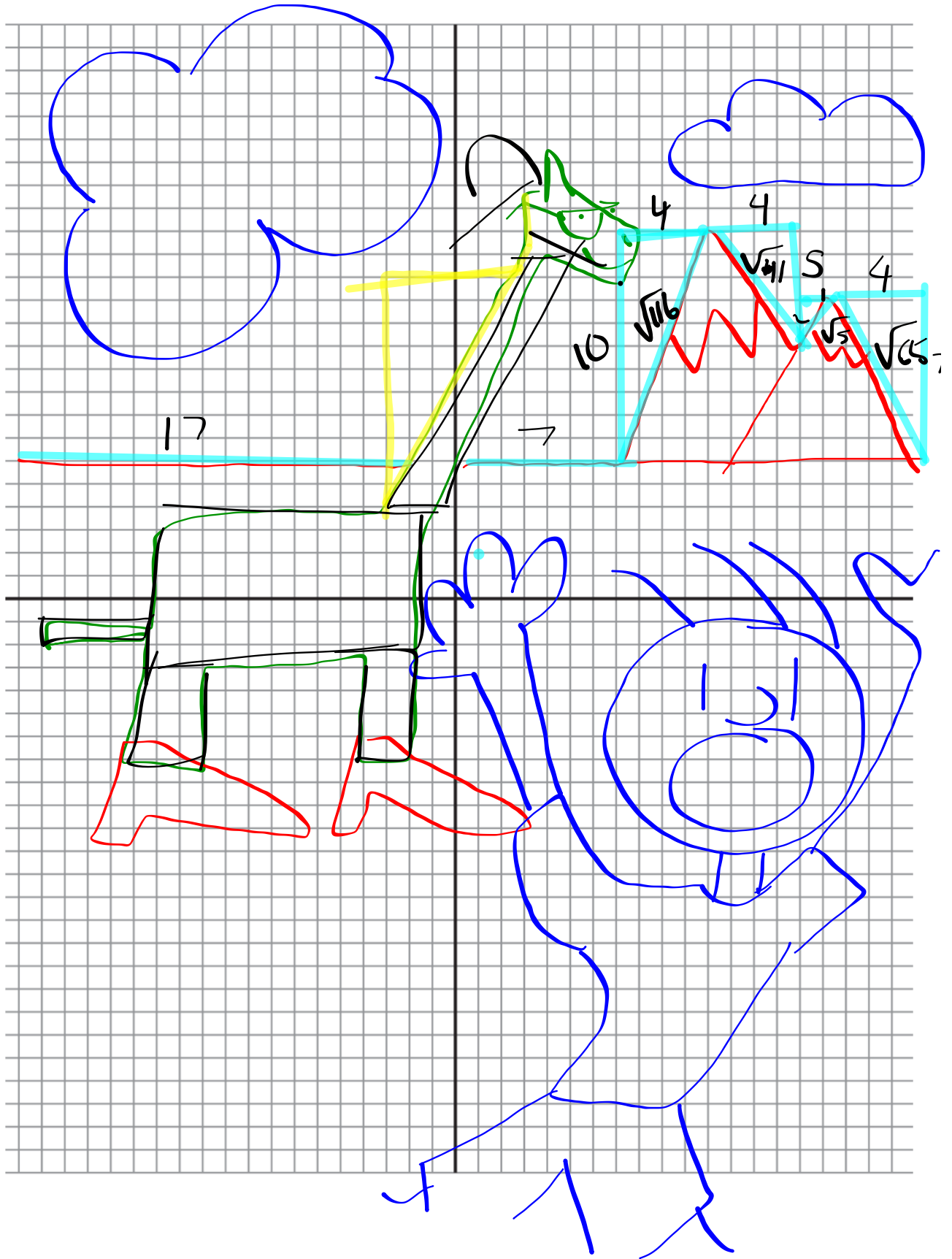


10.



Directions: Find the perimeter of the figure using either the distance formula or the Pythagorean Theorem.





Horizon of Mountain
 $P = 17 + 7 + \sqrt{16} + \sqrt{41} + \sqrt{5} + \sqrt{65}$
= ...

A

Geoffery

Circumference
Circle Perimeter
 $C = 2\pi r$

Area of circle
 $A = \pi r^2$

